The four contributions in this volume were first presented during a workshop held at Pattimura University in May and June 1990. Phono-logical data is presented from four largely unrecorded Austronesian languages, one from each ethnolinguistic region in Maluku. This is reason enough to consider the volume a useful contribution to Austronesian linguistics. Ron Whisler describes the phonology and morphophonology of Sawai, a language of the South Halmahera–West New Guinea subgroup spoken along Weda Bay on Halmahera, North Maluku. John and Sylvia Christensen survey the phonology of Meher, a Central Malayo-Poly-nesian language spoken on Kisar in Southwest Maluku. Carol Laidig examines segments, syllables, and stress in Larike, a Central Malayo-Polynesian language spoken on Ambon in Central Maluku. Finally, Rick Nivens applies the principles of lexical phonology to West Tarangan, a Central Malayo-Polynesian language spoken on the main island of the Aru archipelago in Southeast Maluku.

All four papers are written in the framework of modern generative phonology, which may raise theoretical suspicions among linguists who continue to emphasize the importance of a more taxonomic approach in descriptive linguistics (as I do). However, this volume displays convinc-ing evidence that newfangled approaches like CV phonology and lexical phonology may very well provide useful tools for descriptive linguistics, where the urge to generalize has traditionally been felt less strongly than in theoretical linguistics. This tendency to generalize broadly can be seen in all the papers, where the notes and text offer diachronic speculations to explain exceptions to postulated synchronic rules. Whereas the contrib-utors appear to be very well acquainted with the theoretical tools they employ, they seem less familiar with previous research on genetically
related languages done by linguists other than their colleagues in the Summer Institute of Linguistics (SIL). This is especially apparent in the contributions by Whisler and by the Christensens. As the discussion below will show, I find more to disagree with in the diachronic asides than in the synchronic analyses.

Whisler’s paper (7–32) first describes the inventory of phonemes in Sawai, then discusses syllable structure and phonotactics. The subsequent discussion of morphophonology provides information about the possessive suffixes on inalienable nouns and on noun classifiers. There are interesting observations about the paragogic vowel /i/ that falls at the end of phonological sentences, and the syncope of root-final /i/ under suffixation. CV phonology is used to describe processes of reduplication.

The author stresses the oddity of Sawai phonology in the face of its genetically related neighboring languages. While most of the languages have five-vowel systems, Sawai has a seven-vowel system. Comparative evidence is used to suggest that the extra /i/ vowel in Sawai results from the coalescence of /oa/, while the extra /a/ vowel results from the raising of atonic /a/. Although this adds nothing to our knowledge about the phonological processes internal to Sawai, it does no harm either.

The danger of explaining things that are beyond the scope of the paper is exemplified in Whisler’s note 5, about the anomalous suffix -mam ‘lpe’, where it is suggested that the suffix has been borrowed from Malay kami ‘we (exclusive)’ for three reasons: (1) it does not undergo the assimilation rule that governs other suffixed noun markers; (2) it is used for both edible and nonedible possession; and (3) it is the only suffix to cause stress shift.

The reference to assimilation seems trivial here, because the rule applies only to the 1s and 1pi suffixes. The significance of the reference to the use of -mam with both types of possession is unclear. It is nowhere stated that the other suffixes are not used with each type of possession unless Whisler means that this specific suffix is not attached to noun markers. This would be quite unusual if compared to closely related Buli, but it is exactly what happens in the Ma’ya language of the Raja Ampat Islands of northwest Irian Jaya, immediately to the east of Halmahera. This leaves stress shift as the only useful observation, but that is also attested in Buli, where it is a feature of both the inclusive and exclusive
first-person plural suffixes (Maan 1951), as well as in Ma’ya, where it features a stress-attracting high tone (Van der Leeden 1993). A possible synchronic solution for this phenomenon may well be the fact that this affix is the only pronominal suffix that is heavy, in other words, that has both a nucleus and a coda.

Christensen and Christensen’s paper (33–65) on the phonology of Kinar (also known as Meher) confirms its intermediate position within the Southeast Timor languages, between Tetun on the mainland and Leti in the offshore islands, and also confirms its solitary position within the Luangic-Kisaric subgroup (Van Engelenhoven 1987). The paper is divided into two parts.

The first part contains interesting information on stress, the phoneme inventory, and syllable shapes. The authors consider the absence of phonemically voiced stops in Meher to be particularly striking. However, the same can be said of most of the Luangic-Kisaric languages, because [ə voice] was not a distinctive feature in the protolanguage either. (The recent impact of local Malay on these languages may lead to the emergence of [ə voice] as a distinctive feature.) Instead, the importance of Kinar phonology lies in the “final vowels,” with “optional vocalic release which duplicates the preceding vowel” (36). Unlike closely related languages to the east, Kinar does not display actual metathesis, but rather a stage prior to metathesis that has been described in terms of Stützvokal (Stresemann 1927) or epenthesis (Mills and Grima 1980). These final vowels are a major topic for further linguistic research in Timor and South Maluku, because they may reveal the genesis of the metathesis that characterizes the entire area. I wish the Christensens would have given a stricter definition of the optionality of the final vowels here, because my own elicitation seems to indicate that these vowels are subject to all kinds of prosodic constraints.

The draftlike presentation of the second part of this paper unfortunately undermines the credibility of the first part. The editors should not have published it in its current state. This part systematically overlooks two important phonotactic constraints on the (C)V(C) syllable structure, although the constraints are implied in chart (67) on page 57.

1. Consonant clusters can only occur in intervocalic position, where the first consonant fills the coda slot (K) of the preceding syllable and the second fills the onset slot (O) of the following syllable.
(2) The glottal stop can only occur in the onset slot.

\[
\begin{array}{c}
\sigma \\
\sigma
\end{array}
\]

These observations deal satisfactorily with the “inconsistency” (Steinhauer 1991: 6) in Timorese languages in which preverbal subject markers sometimes join to preceding pronouns and other times to following verb stems. For example, the Dawanese form glossed ‘you scratch’ has been analyzed differently by Middelkoop (1950: 430) and Steinhauer (1991: 6).

(3) \[
\begin{array}{c}
\sigma & \sigma \\
\sigma & \sigma \\
\sigma & \sigma
\end{array}
\]

Whereas Steinhauer’s transcription (3b) shows morpheme boundaries, Middelkoop’s (3a) simply shows syllable boundaries. I therefore cannot fully agree with Steinhauer that Middelkoop’s transcription is inconsistent. The match between morpheme boundaries and syllable boundaries in Steinhauer’s transcription may be inconsistent, but that does not make the syllabic transcription inconsistent. Like other Timorese languages, Meher shows the phenomenon of “morphs sticking to the wrong word,” which obviously misled the Christensens, as it has other analysts.

The Christensens postulate a four-step morphophonemic rule to account for /`/ ‘I’ before vowel-initial verb stems like /`/ ‘to drink’.

(4) a. First the final vowel of /`/ drops.

\[
\begin{array}{c}
/`/ \\
\rightarrow [ .
\end{array}
\]
b. Then the final glottal stop drops.
\[ \frac{\ldots}{\ldots} \rightarrow \frac{\ldots}{\ldots} \]

c. Then the vowel assimilates to the initial vowel of the verb stem.
\[ \frac{\ldots}{\ldots} \rightarrow \frac{\ldots}{\ldots} \]

d. Then the vowel-initial verb stem is preglottalized.
\[ \frac{\ldots}{\ldots} \rightarrow \frac{\ldots}{\ldots} \] ‘I drink’

The authors also postulate a phonemic unit /\~\/, labeled ‘first-person-negative pronoun’, of which no examples are given in the text. The same four-step rule (except for step 3) is said to apply to this form.

(5) a. First the final vowel of /\~\/ drops.
\[ \frac{\ldots}{\ldots} \rightarrow \frac{\ldots}{\ldots} \]

b. Then the final glottal stop drops.
\[ \frac{\ldots}{\ldots} \rightarrow \frac{\ldots}{\ldots} \]

c. (Vowel assimilation does not apply.)

d. Then the vowel-initial verb stem is preglottalized.
\[ \frac{\ldots}{\ldots} \rightarrow \frac{\ldots}{\ldots} \] ‘I do not drink’

The tenuousness of this postulated rule is apparent from the three notes (16, 17, and 18) required to explain away its exceptions.

In the first place, if one wished to maintain this analysis, then it would be more economical to combine steps (a) and (b). Moreover, step (d) is redundant and better omitted from this rule, since it is already handled by the glottal insertion rule $\emptyset \rightarrow \sim /$\#\_V mentioned on pages 42 and 61. Furthermore, vowel assimilation is exclusive to the 1st person singular and could just as easily apply across the morpheme boundary (that is, the glottal stop).

Second, since the glottal stop in \[\sim\] ‘I drink’ contrasts with the alveolar nasal in \[\sim\] ‘he does not drink’, it can be regarded as phonemic rather than phonetic. No examples of the use of /\~\/ appear in the work under review, but the same authors have provided examples elsewhere (Christensen, Christensen, & Blood 1991).

(6) a. 
\[ \sim \]
I do not hear (1991: 98)

b. 
\[ \sim \]
I hear (1991: 63)
Christensen, Christensen, & Blood use the same syllabic transcription that Middelkoop (1950) did, but add, “Subject agreement markers are found on those verbs beginning with a vowel” (1991: 132). The latter statement accounts for the putative negative pronouns such as / ɔ / and / ɔ / ‘he did not’ (53). Compare the following sentences from the earlier work (1991: 4).

(7) a. O kam?
   You not go who marry
   ‘Aren’t you going to the wedding?’

b. Y ɔ !
   I not go
   ‘I’m not going!’

A morphemic as well as syllabic analysis of the relevant forms is shown in (8).

(8) a. \( | / \_ / | \)  
   you not 2s-go

b. \( / \_ / / \_ / / | \)
   I not 1s-go

As can be seen in (8a), consonant-initial verbs are inflected for subject agreement, but a preceding syllable with an empty coda is needed to carry the subject markers since they are mainly single consonants and the principle of single onset fillers (see 1a) prevents them from being added to the beginning of the verb. The glottal stop that functions as the 1s subject marker on vowel-initial verbs is not licensed in the coda slot. It is thus replaced by its syllabic counterpart / ɔ /, which also doubles as a 1s possessive suffix. Brandes (1886) has made similar observations about Kisar, as has Jonker (1904, 1915) about Helong and Dawanese, although of course neither one used the apparatus of CV phonology. A somewhat comparable situation has been attested in Manggarai on Flores (Burger 1946). The elimination of the negative pronouns in Meher makes it look more like other Luangic-Kisaric languages, whose interesting final vowels require further research.

Laidig provides an insightful sketch of Larike phonology (67–126), along with some texts that make the work useful for more than just phonological analysis. It begins with an inventory of phonemes presented in a generative framework. The strong penetration of Ambonese Malay into
the Larike speech community forces the author to add five loan phonemes to the Larike consonant chart.

Laidig then discusses stress phenomena in some detail, concluding that stress is assigned to the surface syllable that contains the underlying penultimate syllable of the (rightmost) root. Stress assignment thus disregards most affixes. So far, I can only agree. However, the search for greater generality leads her to claim (102) that “stress could be considered contrastive in a technical sense, since there are several sets of minimal pairs distinguished only by which syllable is stressed. However upon closer inspection stress can be predicted in these words if the root is known.” Apparent exceptions with ultimate stress are explained as polymorphemic.

In words with prepenultimate stress, onsetless final syllables with /a#/ are explained as petrified remnants of an old noun marker (following Collins 1983), whereas those with /i#/ and /u#/ are considered to be lexical exceptions. The form [ ] ‘blood’ is cited as an example of a lexical exception with /u#/. Its cognate in the adjacent Wakasihu dialect is /lalai/, in which the final /i/ results from a dissimilation process that raises the vowel of the noun marker (Collins 1983: 84). It is thus very possible that all these words with prepenultimate stress and final high vowels contain a petrified noun marker. Further comparison of Larike communalects and other Hoamoal isolects will surely provide some insights into these word-final vowel clusters.

Words having prepenultimate stress and final syllables with onsets are considered to result from vowel epenthesis imposed by the Larike prohibition on closed syllables. The two epenthetic vowels—/e#/ for adapted loans and /u#/ for Larike etyma—do not form part of the root, so these forms are not considered exceptions to the penultimate stress rule. I have two objections to this. From a synchronic point of view, such speculations are beside the point. Every natural language has its exceptions due to historical developments. As long as the cases that violate the rule do not outnumber those that follow the rule, a simple list of types of deviations is sufficient. It is not the task of synchronic linguistics to explain every irregularity in a language.

Collins (1983), taking a diachronic point of view, explicitly identifies the vowel in these Cu# sequences as a petrified Wakasihu (= Larike) noun marker. Thus /u#/ can never be put on par with epenthetic /e#/ in
loans. This is clear from the fact that all examples with /u#/ are nouns, while those with /e#/ can be either nouns or verbs.

Nivens offers a comprehensive phonological view of West Tarangan (127–227), a language never described by any previous linguist. He adopts the approach of lexical phonology, testing its usefulness as a descriptive tool. Lexical phonology stipulates that the phonetic realization of an utterance results from phonological rules implied by morphosyntactic processes ordered in successive lexical, syntactic, and postsyntactic modules. The structures of the underlying morphemes are subject to phonotactic and metrical constraints and thus phonologically filtered.

Nivens convincingly argues that the lexical module in the Coast dialect contains three strata—prefixation; infixation and suffixation; and reduplication—which produce words as output. The glide-to-obstruent rule and the fricative-to-obstruent rule form the lexical alphabet by adding three more allophones to the underlying alphabet. The syntactic module combines the words into phonological phrases, which then pass through the postsyntactic module to yield surface output.

This paper demonstrates satisfactorily that lexical phonology is a useful tool for describing languages that have as impressive an amount of complicated allomorphy as West Tarangan does. It is a pity that the author only summarizes the lexical phonology of the related River dialect. The obvious differences between the phonologies of the Coast and River dialects indicate that the latter is entitled to its own discussion comparable to that provided for the Coast dialect.

This volume as a whole shows that linguistics in Maluku keeps up with the pace of general linguistics. However, the drawbacks of starting from scratch show up in the flawed diachronic analyses contained in the volume. More careful attention to previous linguistic work in Maluku, most of which is still in Dutch, may prevent current linguists from falling into traps already identified long ago.

REFERENCES


This volume contains five papers that report on linguistic fieldwork carried out by members of the Summer Institute of Linguistics (SIL) participating in a cooperative program with Pattimura University. The focus of these papers is on the phonology and/or morphology of four languages for which little or no descriptive information has previously been available. The languages described are Kisar, spoken by a majority of the people on the island of Kisar; Fordata, a lingua franca for a number of speech communities located primarily in the northern part of the Tanimbar archipelago; Kola, spoken in Northern Aru; and Pagu, a language of North Halmahera. Kisar, Fordata, and Kola are Austronesian languages belonging to the Central Malayo-Polynesian subgroup. Pagu, a member of the North Halmahera Family of the West Papuan Phylum, is unrelated.

Cindy Blood’s “Subject-Verb Agreement in Kisar” addresses the observation that while “most closely-related languages encode subject-verb agreement with a person-number prefix on the verbs, Kisar appears to be different in that consonant-initial verbs do not show this prefix in their surface forms” (p. 1). She argues, however, that such prefixes are present in underlying representations. They surface as prefixes when the verb is vowel-initial; but, when the verb is consonant-initial, these prefixes reassociate with the preceding word, provided that (1) it ends with a vowel, and (2) it is in the same syntactic and phonological phrase. If either of these conditions is unmet, then these prefixes do not surface. Examples from Blood follow, in which the 3rd person singular agreement marker /n/ is shown in boldface.

(a) Dedi  nahere mamani.
   Dedi  3s-cry continuously.
   ‘Dedi cries continuously.’

(b) An  wakunu wanakunu Yotowawa.
    he-3s  speak  language  Kisar
    ‘He speaks the Kisar language.’
Under this analysis, such grammatical components as subject pronouns, the negator /ka/, the first verb of certain serial verb constructions, a numerical quantifier, and several other words are analyzed as being in the same syntactic and phonological phrase as the verb. Hence, the subject prefix /n-/ is prefixed to the verb in (a), reassociates with the subject pronoun in (b), but is unrealized in (c), since Lisa is not in the same syntactic phrase. Blood argues that these distributional facts are motivated, at least in part, by a syllable-structure constraint prohibiting tautosyllabic consonant clusters.

Blood’s analysis is generally convincing. Nevertheless, some aspects of her argument might profitably be given further consideration. How, for example, might one formally characterize the process by which a prefix “reassociates,” leading to what she calls “pseudo-suffixation”? Does this mean that the affix actually attaches to the preceding word, or simply that resyllabification of a consonant takes place across word boundaries, reminiscent of liaison in French? It is not entirely obvious to me how one could tell, but if an argument for reattachment is available, then these agreement markers might better be treated as clitics. Also suspect is Blood’s claim that the two alternate forms of the 1st person singular (//-/ before vowel-initial verbs and /u/ elsewhere) are allomorphs, with the first form being motivated by pattern pressure. In her words, “The use of the ’-‘ [i.e., /-/] allomorph when the person-number marker attaches to the front of the verb makes it follow the pattern of other person-number markers, which are all single consonants” (p. 3). From a historical perspective, however, it would seem that the unexpected form is /u/, which exhibits the preservation of a final vowel lost in all other agreement markers. The motivation for the retention of this vowel is presumably a prohibition in Kisar against a word-final (or, more likely, a syllable-final) glottal stop.

Craig Marshall and Sarah Marshall’s “Reduplication in Fordata” employs an autosegmental C-V template approach to describe patterns of reduplication in this language. The most common template is a prefixal CVC, where V is preassociated to /a/. This template associates to roots via a phoneme-driven process. Examples are:
CVC reduplication is derivational; its most common uses are to derive nouns from verbs and adjectives from stative verbs.

A few examples of full reduplication also occur in the language.

leba-leba  ‘DUP-carry’
amar-amar  ‘DUP-day’

No consideration is given to the issue of whether such forms represent a productive pattern of reduplication or are simply morphological fossils. Also likely to leave the reader wondering is the claim that: “Only disyllabic stems are involved in reduplication” (p. 23). Is this an actual constraint on reduplication, or is this simply an accident of the data? Since all words belonging to major classes apparently have at least two syllables, might it simply be the case that no examples of longer forms were recorded, if such exist? Generally, though, reduplication in this language appears to be well behaved, which is to say that it is amenable to description within current theory, quite unlike the patterns of reduplication found in Kola, described in the following papers.

Masahiro Takata and Yuko Takata’s “Kola Phonology” is sequentially the first of two articles on this very interesting language. This paper provides a useful, largely taxonomic account, of basic aspects of the phonology of this language. It includes a list of phonemes and their major allophones and provides descriptions of stress, syllable structure, and phoneme distribution. Also included are brief discussions of the phonological word and morphophonemics. A brief description of reduplication, expanded in the second paper on Kola, is also provided.

Some aspects of the Takatas’ description of Kola are puzzling. On p. 33 and again on p. 36 they describe the vowels /e/ and /o/, phonetically transcribed as [e] and [o], as “low” and “close.” Are these vowels really low, or are they mid, or are they of some other quality that requires a more careful description? The authors also note: “Any vowel may occur as a syllable nucleus” (p. 43). But, this is a vacuous claim since, by definition, a vowel must be able to function as a syllable nucleus. Also unclear is their definition of a phonological word as a “stress group, containing one or several syllables, one of which receives a primary stress” (p. 43). It is not obvious how such a definition would ever permit one to segment a stream of speech into phonological words. Further, they
say nothing about why they wish to introduce this notion, though it clearly has utility in many languages. In an appendix to this article, the Takatas suggest a practical orthography for the language that follows the one-phoneme/one-symbol principle, except in a single case. Without explanation, they propose to represent the two allophones of /d/, [d] and [t̚], by different letters—d and r respectively. Most readers are likely to find this recommendation puzzling, although Rick Nivens (pers. comm.) suggests it is probably motivated by the fact that speakers of Kola are typically bilingual in Indonesian, in which /d/ and /t/ are phonemic.

From a theoretical perspective, the most interesting aspects of Kola examined in this paper are its patterns of consonant coalescence and reduplication. Coalescence is conditioned by place of articulation as well as by stress. However, if the examples provided actually represent synchronic phenomena, then other factors also appear to play a role. In the data cited, /nl/ becomes /n/, but /lr/ becomes /r/ (p. 44). It is unclear what governs the outcome of such coalescence, although one suspects that sonority plays a role. (On p. 35, /t/ in Kola is described as a “voiced alveolar vibrant.” Since, so far as I am aware, “vibrant” simply means “voiced,” it is unclear to me how this consonant is actually articulated.) Reduplication, insightfully employed in this paper to disambiguate whether surface segments are to be represented as underlying vowels or glides, is governed by rules that seem quite peculiar, as noted in conjunction with the discussion of the following paper.

Yuko Takata’s “Word Structure and Reduplication in Kola” provides an overview of Kola morphology. It includes discussions of various word classes—including nouns, pronouns, demonstratives, numerals, adjectives, verbs, and prepositions—as well as reduplication, which is examined in greater depth than in the preceding paper.

A distinction between animate and inanimate noun classes is basic to Kola noun phrase construction: “numerals, adjectives, demonstrative pronouns, and demonstrative clitics must be marked to indicate whether the modified noun is animate or inanimate” (p. 48). Kola also distinguishes alienables and inalienables in possessive constructions. As is characteristic of Central Malayo-Polynesian languages, inalienable possession is marked by the use of possessive suffixes attached to the noun, while alienable possession employs free, preposed possessive pronouns.
The patterns of reduplication that occur in Kola are summarized below, in what the author characterizes as an “ordered set of mutually exclusive rules” (p. 61). The apostrophe (’) marks primary stress.

Rule 1. \( VC_1 VC_2 \rightarrow VC_2'VC_1 VC_2 \) (e.g. bu'tebi -> bub'tebi)

Rule 2. else \( '(C_1)VC_2 \rightarrow aC_2'(C_1)VC_2 \) (e.g. 'nar -> ar'nar)

Rule 3. else \( 'CV \rightarrow Ca'CV \) (e.g. pa'nu -> pana'nu)

Recent theoretical discussions of reduplication are typically based upon either templatic or prosodic models. So far as I can determine, however, neither of these approaches enables one to account for the patterns described here. I cannot, within the space limitations of this review, further elucidate the problems these data pose, but I do wish to call the facts of Kola reduplication to the attention of linguists interested in such issues.

Sandra G. Wimbish’s “Pagu Phonology” discusses the major phonological features of this West Papuan language. It contains the conventional material one would expect to find in a descriptive work, including an inventory of phonemes, descriptions of their articulatory properties, and statements about their distribution. It also provides formulations of a number of phonological rules governing such phenomena as segmental alternations, vowel paragoge and deletion, and stress. Patterns and functions of reduplication are also discussed.

While this paper succeeds in providing the reader with a general overview of the patterns of Pagu phonology, the explication and analyses of the data are sometimes less than satisfactory. For example, one wonders why phonemic glides are phonetically transcribed as vowels, even though the author notes that these segments “seem to have a greater amount of stricture than when filling the nuclear portion of the syllable” (p. 71). The environment for the phonological rule given on p. 76 is unnecessarily complex. A simpler statement would be that unstressed /a/ raises to schwa in word-final position. In section 8.2, it is proposed that paragogic vowels delete before aspect suffixes. One wonders whether such vowels are present before other suffixes. In fact, it seems likely that paragoge simply applies subsequent to suffixation. If this is the case, then no rule of vowel deletion is required, since suffixation eliminates the environment for paragoge. The distinctive feature charts in appendix A are also flawed: /k/ and /g/ are incorrectly specified as [−high], and the treatment of /l/ as [+continuant] is controversial.
The volume as a whole contains a number of typographical errors, some of which could have been eliminated by simple spell-checking (e.g., “cloice” for “choice” on p. 10, “compund” for “compound” on p. 40). None, however, is so serious that it interferes with understanding.

In spite of its minor shortcomings, this issue of NUSA should be welcomed by the linguistic community. Little is known about the languages of Maluku. Consequently, descriptive studies are of considerable value. Data on the languages of this area have the potential to contribute both to linguistic theory, as in the case of Kola reduplication, as well as to historical linguistics. It is apparently from this region that the Austronesian settlers of Oceania emerged. One hopes that additional reports on SIL research in Maluku will be forthcoming.